

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2005/000653

A. CLASSIFICATION OF SUBJECT MATTER
H04B1/69 H04L25/03

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H04B H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category "	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
L , X	<p>MO SHAOMIN: "Data Whitening in Base-band to Reduce PSD of UWB Signals" IEEE STANDARDS ASSOCIATION, 'Online! 17 September 2003 (2003-09-17), XP002360343</p> <p>Retrieved from the Internet: URL :http://grouper.ieee.org/groups/802/15/ pub/2003/Mar03/03122rlP802-15_TG3a-Panason ic-CFP-Document.doc> 'retrieved on 2005-12-20! page 13 - page 19 figures 9,10</p> <p>-----</p> <p style="text-align: center;">- / -</p>	1-21

Further documents are listed in the continuation of box C

Patent family members are listed in annex

*** Special categories of cited documents**

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "B" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

21 December 2005

Date of mailing of the international search report

30/12/2005

Name and mailing address of the ISA

European Patent Office, P B 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Amadei , D

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2005/000653

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
P,L, X	WO 2004/080020 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD; MO, SHAOMIN, SAMUEL; GELMAN,) 16 September 2004 (2004-09-16) paragraph '0029! paragraph '0059! - paragraph '0064! claims 16-27 figures 1,4,8 -----	1-21
X	US 5 241 602 A (LEE ET AL) 31 August 1993 (1993-08-31) column 6, line 32 - column 7, line 2 claims 1,2 figures 4A,4B -----	1-6, 11-14,20
P,L, X	US 2004/156504 A1 (MO SHAOMIN SAMUEL ET AL) 12 August 2004 (2004-08-12) paragraph '0031! paragraph '0040! - paragraph '0042! figures 14,16 -----	9,10,21
X	MO S S ET AL: "Frame synchronization in UWB using multiple SYNC words to eliminate line frequencies" WIRELESS COMMUNICATIONS AND NETWORKING, 2003. WCNC 2003. 2003 IEEE 16-20 MARCH 2003, PISCATAWAY, NJ, USAJEEE, vol. 2, 16 March 2003 (2003-03-16), pages 773-778, XP010639864 ISBN: 0-7803-7700-1 page 776, paragraph II.C -----	9,10,21
A	page 778, paragraph II.F -----	6-8, 15-19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/000653

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 2004080020	A	16-09-2004	EP	1599981 A2		30-11-2005
US 5241602	A	31-08-1993	FR	2687262 A1		13-08-1993
			GB	2264028 A		11-08-1993
			JP	2612397 B2		21-05-1997
			JP	6276175 A		30-09-1994
			KR	9409843 B1		17-10-1994
US 2004156504	A1	12-08-2004		NONE		